BRUHAT BANGALORE MAHANAGARA PALIKE

Asst. Executive Engineer,
T Dasarahalli Sub division

Name of Work:- Construction of RO Plant in Ward No.14

Est Cost:12.50 Lakhs

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BRUHATH BENGALORE MAHANAGARA PALIKE DASARAHALLI ZONE

Name of work:Construction of RO Plant in Ward No.14

Est .Cost Rs .12.50 Lakhs

	Unit	No	Dimension L	B	D	Quantity	Rate in Rs.	Amount in Rs.
Earth work excavation for foundation of building water sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of colds complete as per specifications (Page No. 5 / Item No. 2.3 of PWD SR 2018-19)								
For Ro Plant								
For SSM Wall								
Side Wall		2	5.65	0.75	0.90	7.63		
		2	3.05	0.75	0.90	4.12		
		1	3.15	0.75	0.90	2.13		
		1	5.65	0.75	0.90	3.81		
Steps		8	0.50	0.50	0.50	1.00		
Pole Bottoms		1	5.65	3.20	0.20	3.62		
Flooring						**22.30**	**322.92**	**7201.44**
	Cum							
Basic Rate	299.00							
Area Weightage 8%	23.92							
Total	**322.92**							
KSRB 4-1.2 : Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS (P.No. 13/ LNo. 4.2 of PWD 2018-19)								
For Ro Plant								
Side Walls		2	5.65	0.75	0.15	1.27		
		2	3.05	0.75	0.15	0.69		
		1	3.15	0.75	0.15	0.35		
		1	5.65	0.75	0.15	0.64		
Steps		8	0.50	0.50	0.10	0.20		
Pole Bottoms		1	5.50	2.90	0.10	1.60		
Flooring						**4.74**	**5698.60**	**27025.59**
	Cum							
Basic Rate	5194.00							
Deduct Cement cost as per SR -18-19 Page No.V Sl No 123	-1079.39	Note:- (220*490.63/100)=1079.39						
Add Cement cost as per Issue rate	1161.86	Note:- (220*264.06/50)=1161.86						
Sub Total	**5276.48**							
Area Weightage 8%	422.12							
Total	**5698.60**							
Providing and constructing granite /trap/ baslat size stone masonry in foundation with cement mortar 1:6, stones hammerd dressed in courses not less than 20cms high, bond stones at two m part in each course including cost of materials, labour, curing complete as per specifications (Page No. 25/ Item No. 5.6, PWD SR 2018-19)								
For Ro Plant								
Below Ground Level								
Step								
1m		2	5.65	0.75	0.40	3.39		
		2	3.05	0.75	0.40	1.83		
		1	3.15	0.60	0.40	0.76		
1 Step		2	5.65	0.60	0.40	2.71		
1m		2	3.05	0.60	0.40	1.46		
		1	3.15	0.75	0.60	1.42		
Entrance Steps								
Above Ground Level								
Step								

Sl No		Unit	No	Dimension L	B	D	Quantity	Rate in Rs.	Amount in Rs.
10	Fabrication supplying and erecting M.S. tubular trusses of all spans as per approved drawing & sign with prefabricated steel applications using quality material and are durable, reliable and corrosion and abrasion resistant. Welding shall confirm to latest structural welding code. Quality shall be on various parameters like shape, size, design gauge and polish. The entire trusses is anchored in RCC column by using 4 nos of M.S. anchor bolts at each support with 10mm thick t) base plate and shoe plate. The work includes cutting, straightening, placing in position of M.S. pipes and welding wherever necessary and applying one coat of redoxide primer coat to all the members including cost of all materials, labour charges, and hire charges of machineries for cutting, welding, grinding and erection equipments, with all lead and lift, transportation, letc., complete as per specification. (Item No.7.29, Page No.40, PWD SR 2018-19)								
	for Ro Plant								
			No's	Length		Constant Kg/mtr			
	Verticle Bars								
	100X100X5mm thick		3*1	3.20		14.80	142.08		
	100X100X5mm thick		3*1	3.00		14.80	133.20		
	Horizontal Bars								
	100X100X5mm thick		4*1	3.20		14.80	142.08		
	100X100X5mm thick		4*1	5.80		14.80	257.52		
	Top								
	Verticle Bars								
	100X60X5mm thick		1	3.20		11.70	37.44		
	Horizontal Bars								
	100X60X5mm thick		1	5.80		11.70	67.86		
		Sqm					780.18	119.88	93527.98
	Basic Rate	111.00							
	Area Weightage 8%	8.88							
	Total	119.88							
	Providing and fixing self-supported, ribbed, high quality, high grade (D 350 MPA Yst Min), pre-painted Galvalume steel roof sheet, coated with bare Galvalume coating A Z 150, @ 150 gms/Smtr 55%AL,45%Zn) by hot dip process, of total coated thickness as specified for different spans with a tolerance of +/- 0.02 mm, according to technical specification confirming to A 792, with NCCA 11-1, or ECCA T4 Pencil hardness HB, NCCA standard T-Bend test. The roof should be fastened to the gutter beam, on the external sloping side, at an interval of 51mm Centre to Centre,to a depth of 65 mm with GI anchor bolts and neoprene washers & subjecting the gutter beam to Schmidt, Hammer test to ensure the anchorage of the anchor bolts. The self-supported roofing system should be designed to with stand the wind load (As per IS 875 part-3) & Earthquake load (as per IS 1893) & the design should also comply with any other technical requirements such as turbo ventilators of 0.60 mts. dia and skylights of size 4.26 x 0.60 mts. fixed one in each row @ 10.00 Mtr C/C along the length & hangers for electrical fixtures as per the requirements including cost of all materials &labour for erection, all lead and lift, loading and unloading, HOM of machineries etc., complete as per the standard detailed technical (a) Span Above 27 Meters upto 30 Meters (b) Material Specification: Colour Coated Imported Galvalume Sheet, weighing 17.63 kg/sqm BMT: 1.40 MM, APT: 1.47 MM, tolerance 0.02mm specification, design and directions of the engineer in charge of the work **(Page No. 311, It No. 38.46.7 of KPWD S.R 2018-19)**									
	RO Plant								
	Wall								
	Right Side		1	5.80		3.20	18.56		
	Left Side		1	5.80		3.00	17.40		
	Back Side		2	3.20		3.10	19.84		
	Front		1	1.50		3.00	4.50		
	Front Top		1	3.20		0.60	1.92		
	Roof		1	6.00	4.00		24.00		
		Sqm					86.22	2359.80	203461.96
	Basic Rate	2185.00							
	Area Weightage 8%	174.80							

Sl No		Unit	No	Dimension			Quantity	Rate in Rs.	Amount in Rs.
				L	B	D			
			2	3.05	0.30	0.30	0.55		
			1	3.15	0.30	0.30	0.28		
		Cum					1.85	6666.26	12329.25
	Basic Rate	6045.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1668.14	Note:- (340*490.63/100)=1668.14						
	Add Cement cost as per Issue rate	1795.61	Note:- (340*264.06/50)=1795.61						
	Sub Total	6172.47							
	Area Weightage 8%	493.80							
	Total	6666.26							
7	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, for coping. Including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2, (P. No.13/ I. No.4.6 of PWD SR 2018-19)								
	For Ro Plant								
	Coping								
	For Steps		3	5.80	0.30	0.10	0.52		
			1	5.80	0.90	0.10	0.52		
		Cum					1.04	5952.93	6214.86
	Basic Rate	5422.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1177.51	Note:- (240*490.63/100)=1668.14						
	Add Cement cost as per Issue rate	1267.49	Note:- (240*264.06/50)=1795.61						
	Sub Total	5511.98							
	Area Weightage 8%	440.96							
	Total	5952.93							
8	KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 - TMT bars Fe 500 (Page No. 18 / Item No. 4.46.2, PWD SR 2018-19)								
	Consider 95 kg/cum of concrete			1.85	95.00		175.70		
		Tonne					0.18	76643.28	13466.42
	Basic Rate	70966.00							
	Area Weightage 8%	5677.28							
	Total	76643.28							
9	Providing and removing centering shuttering strutting propping etc., and removal of form work for sides and soffits of beams beam houchings cantilever girders bressumers and lintels not exceeding 1m in depth including cost of all materials, labour complete as per specification (Page No. 17 / Item No. 4.34, PWD SR 2018-19)								
	For Ro Plant								
	For Plinth Beam								
			4	5.65		0.30	6.78		
			4	3.05		0.30	3.66		
			2	3.15		0.30	1.89		
		Sqm					12.33	315.36	3888.39
	Basic Rate	292.00							
	Area Weightage 8%	23.36							
	Total	315.36							

Assistant Engineer

Executive Engineer

Sl No		Unit	No	Dimension			Quantity	Rate	Amount
				L	B	D		in Rs.	in Rs.
	Room		2	5.65	0.45	0.40	2.03		
			2	3.05	0.45	0.40	1.10		
			1	3.15	0.45	0.40	0.57		
	Entrance Steps		3	5.80	0.45	0.20	1.57		
	Stage		1	5.80	0.90	0.20	1.04		
	Deductions								
	Pole Bottoms		-8	0.50	0.50	0.50	-1.00		
		Cum				Net Qty	**16.88**	**4983.92**	**84121.17**
	Basic Rate	4596.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-245.32	Note:- (0.2*1*1=0.2 Cum/Sqm) (0.2*250*490.63/100)=245.32						
	Add Cement cost as per Issue rate	264.06	Note:- (0.2*250*264.06/50)=264.06						
	Sub Total	**4614.75**							
	Area Weightage 8%	369.18							
	Total	**4983.92**							
4	Providing ruled pointing to coursed stone masonry with cement mortar 1:3 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications (Page No. 115 / Item No. 15.3, PWD SR 2018-19)								
	For Ro Plant								
	Above Ground Level								
	1st Step								
	Room		2	5.65		0.40	4.52		
			2	3.05		0.40	2.44		
			1	3.15		0.40	1.26		
	Entrance Steps		1	5.80		0.20	1.16		
			1	5.80		0.20	1.16		
			1	5.80		0.20	1.16		
			1	5.80		0.20	1.16		
	Entrance Steps Side		2	1.65		0.80	2.64		
		Sqm					**15.50**	**157.49**	**2441.09**
	Basic Rate	142.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-50.04	Note:- (0.02*1*1=0.02Cum/Sqm) (0.02*510*490.63/100)=50.04						
	Add Cement cost as per Issue rate	53.87	Note:- (0.02*510*264.06/50)=53.87						
	Sub Total	**145.82**							
	Area Weightage 8%	11.67							
	Total	**157.49**							
	Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20cms in depth compacting each deposited layers by ramming after watering with lead upto 50m and lift upto 1.5m including cost of all labour complete as per specification (Page No. 7 / Item No. 2.10 / PWD SR 2018-19)								
		Cum				Qty as per It 1	**22.30**	**217.08**	**4841.10**
	Basic Rate	201.00							
	Area Weightage 8%	16.08							
	Total	**217.08**							
	KSRB 4.2.7: Providing and laying in position reinforced cement concrete cum of Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70 cum and fine aggregtes @ 0.47cum, with super plasticisers @ 3 liters confirming to IS 5103-1999 reafirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1,4.6 Specification No. KBS 4.1, 4.6. (Page No. 14, Item No. 4.12, PWD SR 2018-19)								
	For Ro Plant								
	For Plinth Beam								
			2	5.65	0.30	0.30	1.02		

Sl No		Unit	No	Dimension L	B	D	Quantity	Rate in Rs.	Amount in Rs.
	Total	2359.80							
12	KSR 7.5 Providing and fixing pull and push type rolling shutters of approved make out of 18 gauge, 75mm wide cold rolled steel laths of convex corrugation, with side guides and bottom rail, with interlocking arrangements for steel laths by means of alternate clips, suspension shaft with high tension coil type springs two numbers, mounted on specially designed pipe shaft, with bracket plates, guide channels, ball bearing arrangements, for inside & outside locking with push & pull operations complete including pulling hooks, 4Nos. handles with all fittings and accessories, painted with a coat of red lead paint (without top cover) cost of materials, labour, HOM of machinery complete as per specifications. Shutter size 3mx2.8 m Specification No. KBS 7.107 7.12 (Page No.33, It No.7.5, of KPWD S.R 2018-19)								
	RO Plant		1	2.50		2.50	6.25		
							6.25	2815.56	17597.25
		Sqm							
	Basic Rate	2607.00							
	Area Weightage 8%	208.56							
	Total	2815.56							
13	KSR 7.6 Providing and fixing top covers made out of 20 guage M.S. sheet over pull and push rolling shutters bent to shape including cost of red lead primer coat of painting , materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 7.10.6 / 7.12 (Page No.34, Item No.7.6 of PWD SR 2018-19)								
	RO Plant		1	2.50			2.50		
							2.50	520.56	1301.40
		Mtr							
	Basic Rate	482.00							
	Area Weightage 8%	38.56							
	Total	520.56							
14	Providing 20mm thick cement plaster in single coat with cement mortar 1:3, to stone masonry & concrete surface including rounding off corners wherever required smooth rendering. : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications (Page No116, Item No.15.18 PWD SR 2018-19)								
	OutSide								
	Alround R O Plant								
			1	18.00		0.40	7.20		
			3	5.80		0.50	8.70		
	For Steps		1	5.80	0.90		5.22		
							21.12	316.25	6679.20
		Sqm							
	Basic Rate	289.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-50.04	Note:- (0.02*1*1=0.02Cum/Sqm) (0.02*510*490.63/100)=50.04						
	Add Cement cost as per Issue rate	53.87	Note:- (0.02*510*264.06/50)=53.87						
	Sub Total	292.82							
	Area Weightage 8%	23.43							
	Total	316.25							
15	Providing and laying flooring using prepolished, water cut/gang saw 19mm thick granite laid over bed of 20mm thick 1:4 cm & jointed with neat cement slurry mixed with pigment to mach shade of granite slabs including laying POP on finished surface and cleaning the surface, including the cost of all materials and labours etc., complete as per specifications. - using silver grey granite / Multy Red / Ruby Red / Black / HassanGreen Granite of width not less than 900mm (P.No.110, I No.14.47.2 of PWD SR 2018-19)								
	R O Plant		1	5.80	3.20		18.56		
	Flooring		3	5.80		0.50	8.70		
	For Steps		1	5.80	0.90		5.22		
							32.48	2603.72	84568.73
		Sqm							
	Basic Rate	2408.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-37.29	Note:- (0.02*1*1=0.02 cum/Sqm) (0.02*380*490.63/100)=37.29						

Sl. No.		Unit	No	Dimension			Quantity	
				L	B	D		
	Add Cement cost as per Issue rate	40.14	Note:- (0.02*380*264.06/50)=40.14					
	Sub Total	2410.85						
	Area Weightage 8%	192.87						
	Total	2603.72						

KSRB 7.15 Providing, fabricating, assembling and fixing in position aluminium partitions using aluminium sections of mat finish or glassy finish in combination of plain grove, single grove and double grove as per requirements for the frames of overall size 63.5mm x 38.1 mm. with thickness of 2mm. having section weight, plain sections 1.054kg/m, single grove thickness 1.85mm. section weight 1.094kg/m+ double grove thickness 1.9mm section weight 1.094kg/m and bottom member 114.3 mm. x 44.45mm. thickness 3.18mm. weight 2.646 kg/m; aluminium louvres section of size 36. 5mmx34.93mm 1.45mm. thick section weight 0.429kg/m; bottom portions provided with 12mm. thick prelaminated sheet both sides of approved colour lamination exterior grade upto 0.9m height; spacing of vertical member not exceeding 0.6 m. c to c. sections are cut to the required lengths, joints mitered and corners grinded subdividing bars, tenoned and riveted to the frames; the assembled frame stiffened with corner angles, stripped and fixed with screws, rawl plugs and teak wood gutties to R.C.C columns on sides, R.C.C. lintels or beams at top and floor at bottom, including cutting chistelling and making good with cement mortar to match the surface; providing and fixing 5.5mm. thick plain glass for middle portion viz., fr.9m. to 2.13 m. and top panel with louvres sections; the glass and panels fitted with glazing clips of 19mmx17.3mm. of thickness 0.9mm. weight 0.124kg/m, aluminium sections treated for removal of any rust and prevention of further rust formation, coated with greasy materials for non-adherence of mortars or any other sticky materials; vertical members embedded in the flooring by making suitable sized holes and fixing with cement mortar, with necessary opening for fixing of door of standard size (excluding cost of door) all the frame thoroughly cleaned, free from rust, scale or dirt including cost of materials, fixtures, labour and HOM of machinery complete as per specifications.using aluminium section powdered coated to a minimum of 60-70 microns with exterior durable pure polyester grade powder of approved quality (P.No.38, I.No.7.15.1 of PWD SR 2018-19)

R O Plant							
Room		1	2.10		2.70	5.67	
						5.67	36
	Sqm						
Basic Rate	3364.00						
Area Weightage 8%	269.12						
Total	3633.12						

KSRB 7.17 Providing, fabricating, assembling and fixing in position aluminium doors using following aluminium mat finish or glossy finish, outer frame plain section 101.6x44.45mm thickness 3.18mm, section weight 2.404 kg/m, door shutters vertical section 44.62x44.45mm thickness 3.18mm, section weight 1.505kg/m, top section 47.62x44.45mm thickness 3.00mm, section weight 1.426kg/m bottom section 114.3x44.45 thickness 3.18mm, section weight 2.646kg/m, door central section 49.91x44.45mm thickness 3.00mm, section weight 1.495 kg/m glazing clips 19x17.3x11mm thickness 0.9mm section weight 0.124kg/m, aluminium sections cut to length joint metred cornersgrinded, the shutters pivoted opening arrangement with heavy duty aluminium alloy automatic door closures floor mounted, providing and fixing standard approved accessories, such as aluminium handle for full width or length, tower bolts, lock, pivots, P.V.C or rubber gasket with 5.5m. thick plain glass for top and bottom panel; aluminium sections treated for removal of any rust and prevention of further rust formation, and coated with greasy materials for non-adherance of mortars or any other sticky materials; the assembled frame fitted with the corner angles, strips and fitted with screws, rawl plugs or teakwood gutties to R.C.C. columns or masonry on sides, beams and flooring in bottom, including cutting, chistling and making good with cement mortar to match the surface; all the frames throughly cleaned free from rust, scale, or dirt including cost of materials, fixtures, labour and HOM of machinery complete as per specifications using aluminium section anodized to 12 - 15 microns.**(Ltm No.7.17.1, P.No.39, SR:2018-19)**

For Ro Plant							
Door		1	0.90		2.10	1.89	
						1.89	662
	Sqm						
Basic Rate	6131.00						
Area Weightage 8%	490.48						
Total	6621.48						

	Unit	No	Dimension L	B	D	Quantity	Rate in Rs.	Amount in Rs.
KSRB 15-18.1 : Applying red lead ready mix priming coat over new steel or other metal surface including preparing the surface after throughly cleaning oil, grease, dirt and other foreign matter, and scoured with wire brushes, fine steel wool, sand papers including cost of materials, labour, complete as per specifications (P.No- 121,It. No-15.73 of KPWD S.R 2018-19)								
RO Plant								
Rolling Shutter		2	2.50		2.50	12.50		
		1	2.50		0.80	2.00		
Verticle Bars								
100X100X5mm thick		3	3.40		0.40	4.08		
100X100X5mm thick		3	3.20		0.40	3.84		
Horizontal Bars								
100X100X5mm thick		4	3.20		0.40	5.12		
100X200X5mm thick		4	5.80		0.40	9.28		
Top								
Verticle Bars								
100X60X5mm thick		1	3.20		0.32	1.02		
Horizontal Bars								
100X60X5mm thick		1	5.80		0.32	1.86		
						39.70	**44.28**	**1757.92**
	Sqm							
Basic Rate	41.00							
Area Weightage 8%	3.28							
Total	**44.28**							
KSRB 15-18.2 : Providing and applying enamel metal paint two coats (excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications.(P.No- 121,It. No-15.74 of KPWD S.R 2018-19)								
		Qty vide item No.16				39.70		
						39.70	**102.60**	**4073.22**
	Sqm							
Basic Rate	95.00							
Area Weightage 8%	7.60							
Total	**102.60**							
Water purification plants: Supplying, Installation andCommissioning of automatic Water purification plant (RO+UF)with all accessories piping, product water tank on single phase power supply on Turnkey/EPC Basis as per the enclosed detailed Technical Specifications including cost of material, loading and unloading and as directed by the Engineer in charge **1000 LPH SS** (P.No.120, I.No.14.01(h) of RWS SR 2018-19)								
		1				1.00		
						1.00	**400000.00**	**400000.00**
	Nos							
Basic Rate	400000.00							
Additional price for installation of Ultra Voilet System								
		1				1.00		
						1.00	**10000.00**	**10000.00**
	Nos							
Basic Rate	10000.00							
KSRB 13-11.1 : Providing and placing on terrace, polyethylene water storage tanks with manhole lid and suitable locking arrangements, making holes of suitable diameter for inlet, outlet and over flow pipes, including cost of all materials, labour, transport charges, HOM of equipments and testing complete as per specifications (For 1000 litre capacity) Specification No.KBS 13.22 (P.No.96, I.No.13.78 of RWS SR 2018-19)								
		1				1.00		
						1.00	**7374.24**	**7374.24**
	Nos							
Basic Rate	6828.00							
Area Weightage 8%	546.24							
Total	**7374.24**							

Sl. No		Unit	No	Dimension L	B	D	Quantity	Rate in Rs.	Amo in R
23	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and good the walls etc.) - **20mm nominal OD pipes. (P.No.96, I.No. 13.86.2 of PWD SR 2018-19)**								
			1	30.00			30.00		
		Mtr					**30.00**	**253.80**	761
	Basic Rate	235.00							
	Area Weightage 8%	18.80							
	Total	**253.80**							
24	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and good the walls etc.) - **25mm nominal OD pipes(P.No.96, I.No. 13.86.3 of PWD SR 2018-19)**								
			1	20.00			20.00		
		Mtr					**20.00**	**316.44**	63
	Basic Rate	293.00							
	Area Weightage 8%	23.44							
	Total	**316.44**							
25	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and good the walls etc.) - **32mm nominal OD pipes(P.No.96, I.No. 13.86.4 of PWD SR 2018-19)**								
			1	20.00			20.00		
		Mtr					**20.00**	**403.92**	8
	Basic Rate	374.00							
	Area Weightage 8%	29.92							
	Total	**403.92**							
	Electrical Works								
26	Supplying heavy gauge PVC conduit pipe ___ dia ___ mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws 19/20mm dia 2mm thick(P.No-2 ,I No-1.1.1 of Electrical PWD S.R 2019-20)								
	PVC conduit pipe 9/20mm	**Mtrs**	1	40.0			**40.00**	**50.00**	
27	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694 confirming to latest amendments (P.No-5 ,I No-2.3 of Electrical PWD S.R 2019-20)								
	1.5 Sqmm	**Mtrs**	1	70.00			**70.00**	**20.50**	
	2.5Sqmm	**Mtrs**	1	50.00			**50.00**	**32.00**	
	4.0Sqmm	**Mtrs**	1	20.00			**20.00**	**45.00**	
28	Supplying and wiring adopting loop system in existing PVC Conduit /casing capping casing capping using 2x1.5Sqmm (Phase & Neutral) & 1x1.0 sqmm (Earth wire) FRLS multi strand PVC insulated copper wire (confirming to IS-694 and latest amendments) without control switch shall be fixed on the existing plastic sheet/ gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block complete for each outlet. (I No-2.2 Pg No. 5 of PWD S.R 2019-20)								

	Unit	No	Dimension			Quantity	Rate in Rs.	Amount in Rs.
			L	B	D			
ort point upto 3Mtr from tapping Point to out let via switch box	Points	4				4.00	160.00	640.00
Medium point above 3Mtr upto 6Mtr from tapping point to out let via switch box	Points	2				2.00	250.00	500.00
Long point above 6Mtr upto 10Mtr from tapping point to out let via switch box	Points	1				1.00	375.00	375.00
Supplying and flush mounting powder coated / galvanized metal box suitable for mounting modular switch plates. The box should be firmly flush mounted after due groove cutting in Brick/Stone/R.C.C wall. (Page No -9, I No-3.4 of electrical PWD S.R 2019-20)								
1-3Way	No's	3				3.00	95.00	285.00
16-18Way	No's	2				2.00	180.00	360.00
Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box. (Page No -9, I No-3.5 of electrical PWD S.R 2019-20)								
1 to 3 Module	No's	3				3.00	110.00	330.00
16-18 Module	No's	2				2.00	270.00	540.00
Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293. (Page No - 10, I No-3.6 of electrical PWD S.R 2019-20)								
6Amps one way Switch (I No-3.6.1)	Each	2				2.00	70.00	140.00
6Amps 3way socket (I No-3.6.3)	Each	2				2.00	105.00	210.00
16Amps one way switch (I No-3.6.8)	Each	2				2.00	115.00	230.00
6/16Amps universal socket (I No-3.6.11)	Each	3				3.00	162.00	486.00
1000-1200Watts Dimmer (I No-3.6.7)	Each	6				6.00	550.00	3300.00
Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898 6-32 Amps DP (Page No -27, I No-5.17.4 of electrical PWD S.R 2019-20)								
	Each	2				2.00	909.00	1818.00
Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3 of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia (I No-6.1, Page no.17 of Electrical PWD S.R 2019-20)								
	No	2				2.00	2999.70	5999.40
SSupplying & fixing of Porcelain fuse channel with cut outon existing wooden/panel using necessary nuts, bolts and washers. 16Amps(I No-5.7.1, Page no.24 of Electrical PWD S.R 2019-20)								
	Each	1				1.00	117.00	117.00

Sl. No		Unit	No	Dimension			Quantity	Rate in Rs.	Amount in Rs.
				L	B	D			
35	Supplying & Fixing retrofit type -PL- LED lamp..... W LED Linear source with CCT 6500 degree K, > 70%. Efficacy >80 lumen per watt, life> 25000 burning hours and Compliance to IS 16322/IEC 60598, LM 79 & LM 80. The LED are driven by HF electronic diver integrated in the system, with PF > 0.95, Power loss should < 5% of lamp wattage., short circuit & open circuit protection to be integrated in the circuit, THD less than 20%, life as per LM 79. The operating input voltage should be between 130 to 275 volts. Tested by NABL/CPRI accredited laboratory with 2years Warranty against any manufacturing defect working under standard electrical **18-20 Watts** (Page No.64, Item No.12.2 , PWD Electrical SR 2019-20)								
			5				5.00		
		Nos					5.00	425.00	2125.00
36	Fixing all types and all capacities of fluorescent / false ceiling / spot light / CFL / LED fittings indoor on the wall / ceiling / rafters / girders using 23/0.0076" twin twisted PVC insulated wires, required Nos of round blocks and clamps On wall / ceiling / Rafter / Girders(Page No.79, Item No.14.7.1 , PWD Electrical SR 2019-20)								
			5				5.00		
		Nos					5.00	110.00	550.00
								Total Construtlion cost	1070947.2
								GST Charges 12%	128513.64
								Tender Premium 5%	48192.62
								Sub Total	1247653.4
								Miscellaneous & Rounding Off	2346.51
								Grand Total	1250000.0

Rupees Twelve Lakh(s) Fifty Thousand Only

Certificate :-

1) This Work Comes Within BBMP Limits.

2) Certified that personaly Inspected the Work Spot.

3) Certified that the Estimate is Prepared Based on CSR of PWD Bangalore Circle 2018-19 and Issue Rates from 20-05-20

4) Estimate is Prepared Making Use of essential itemof work as per site conditions in safest way of Execution in most economical way

5) This work is not include in any othes program of work.

Assistant Engineer
Ward No.14

Assistant Executive Engineer
T.Dasarahalli Sub - Division

Executive Engineer
Dasarahalli Zone

ADMINISTRATIVELY SANCTIONED FOR
Twelve lakhs Fifty Thousands only
Under the Head of Account P-3075
Vide BBMP/EE(D) DAS/ 131 Subject
to conditions contained in Enclosed Memo
No EE/DAS/22.1.131/20-21 Dt: 23/9/20
JE Exe. Engr
DASARAHALLI BBMP
23/9/20

Technically Sanctione for Rs. 12.50 lakhs
Rs. in words Twelve lakhs fifty thousands only
Under P-3075
Job Code No 014-21-000007
Registered as CE No
to conditions contained in Enclosed Memo
No EE/DAS/TS/27/20-21 Dt 23/9/20
AE/JE
Executive Engr
23/9